Minnesota and Georgia's Transition to the National Incident-Based Reporting System (NIBRS)

On January 1, 2021, the Federal Bureau of Investigation (FBI) plans to retire its Summary Reporting System (SRS) of crime data reporting and thereafter only collect crime data statistics through its NIBRS. This will be a major developmental change in American crime data reporting, and the 2021 deadline for the transition will likely become increasingly challenging for law enforcement agencies that do not prepare for it. The Minnesota Bureau of Criminal Apprehension (BCA) and the Georgia Bureau of Investigation (GBI) have already been working to achieve their own transitions to the NIBRS well ahead of that deadline.

The superiority of the NIBRS over the SRS

Since 1930, the FBI Uniform Crime Reporting (UCR) Program has collected crime data through the SRS, compiling and reporting total figures on key categories of crimes from participating law enforcement agencies. In a time before electronic computing, the SRS began as a paper-based system that simplified the picture of American crime. Under the SRS, law enforcement agencies would collect statistics on arrests for seven major types of crimes. To simplify the reporting and tabulation of numbers, the SRS features a Hierarchy Rule that ranks the crimes in order of severity and only accepts the report of the one most severe crime within a criminal incident. For example, if a criminal incident includes a robbery and a murder, then the Hierarchy Rule dictates that a law enforcement agency will only report the murder.

The SRS has evolved over the decades to include electronic submission, more categories of crime data, and a few incident-based factors, but it is still very limited and outdated in its basic concept. Only recording a few types of crimes, the SRS does not account for many other types of crimes, such as embezzlement. Also, because of the Hierarchy Rule, the SRS does not report a fully accurate number of total crimes within the reported categories. Finally, because the SRS collects little incident-based data on crimes, researchers cannot use it to answer many types of questions about crime causation. For example, the SRS cannot answer the question of how many kidnappings happen at schools or how many robbery victims are related to their robbers. These weaknesses of the SRS severely limit its scientific value as a guide for well-informed public policy, meaningful public discussion, or strategic policing.

In contrast, the NIBRS is a much more comprehensive system of crime data collection and reporting. The NIBRS collects incident and arrest data on 52 types of "Group A" offenses and arrest data on 10 "Group B" offenses. These offenses include many that the SRS omits, such as extortion. With no Hierarchy Rule, the NIBRS can collect data on as many as 10 criminal offenses per incident, yielding a more accurate accounting of the total number of reported crimes. The NIBRS captures data on incident-related details that are not included in the SRS, such as the relationships between criminals and victims. Finally, because the NIBRS does not aggregate the data (i.e., it does not exclusively report total figures rather than component subtotals), it can be used to answer detailed questions about crime, such as how many kidnappings happen at daycare facilities.

The SRS served the nation's law enforcement interests during the decades when a nationwide computer-based system was not feasible. However, technological development in more recent decades has created the potential for much more sophisticated data collection and reporting systems such as the NIBRS. Unfortunately, only about one-third of the nation's law enforcement agencies participate in the NIBRS.

On December 3, 2015, the FBI Criminal Justice Information Services (CJIS) Advisory Policy Board (APB), in cooperation with representatives of the IACP, the National Sheriffs' Association (NSA), the Major Cities Chiefs' Association, the Major County Sheriffs' Association, the Bureau of Justice Statistics, and the Department of Justice, resolved that the FBI should retire the SRS within five years and only collect crime data through the NIBRS thereafter. On February 9, 2016, FBI Director James B. Comey announced that the FBI would retire the SRS on January 1, 2021, and by then make the transition to collecting crime data only through the NIBRS.

Minnesota's transition to the NIBRS

In Minnesota, the BCA has already been preparing for the NIBRS transition for years. In the mid-2000s and again in the late-2000s, the state of Minnesota assessed the possibility of transition to the NIBRS as part of a project to replace its Minnesota Offense Codes (MOCs). The MOCs are a system that Minnesota uses to classify offenses with codes.

In 2012, to address the common state problem of lack of consistency in law enforcement recordkeeping and reporting—a result of many law enforcement agencies using different data systems and reporting practices—the BCA began looking at options for replacing its crime reporting system.

The BCA analyzed its reporting needs and goals for the future and formed a focus group that consisted of 15 law enforcement agencies, including a combination of large metropolitan agencies and smaller, nonmetropolitan agencies. The focus group reached the unanimous conclusion that the BCA should make the transition to reporting through the NIBRS. The BCA agreed with the focus group's recommendation and presented it to the Criminal and Juvenile Justice Information Policy Group. With a charter and membership defined by statute, the Policy Group (which is now called the Criminal and Juvenile Justice Information Advisory Group) provides direction for statewide criminal justice information integration. The Minnesota Legislature approved and funded the initiative in July 2013. In October 2013, the BCA began its Crime Reporting System project that included making a transition from the state's SRS mainframe system to the NIBRS. The BCA considered several options: statewide NIBRS submission, statewide SRS submission, or a hybrid system of both NIBRS and SRS submission. The BCA began developing its NIBRS submission system in late 2014. As of September 2016, the BCA expected to achieve hybrid submission by 2017 and then to continue to work toward full NIBRS submission.

The BCA's effort to effect a transition to the NIBRS faced technical challenges. When the BCA implemented its NIBRS transition plan, it went beyond the standard "flat file" format of unstructured data and utilized the more versatile Extensible Markup Language (XML) format

that can transmit structure along with data. However, because the FBI still uses a flat file standard for agencies to submit data to the NIBRS, the BCA needed to convert its XML data into flat files for its NIBRS submissions. The BCA wished to be able to receive and retain more incident-related data than the NIBRS flat file format would allow, so the BCA needed to conduct an analysis to develop logic which would allow it to both capture NIBRS-compliant data and also capture a larger amount of incident data.

For example, Minnesota allows for agencies to report more than ten criminal offenses per incident, while the NIBRS is limited to capturing ten. Another example is that Minnesota collects reports on an unlimited number of drug types, while the NIBRS limits the number of reported drug types to three. This difference of specifications required Minnesota to generate two sets of data: one set of NIBRS-compliant data and one set with additional data elements for state usage. Minnesota was one of only a few states that were on the forefront of using XML for NIBRS submissions, so the BCA had limited options for consulting specification documents or the experiences of other states and the FBI for guidance.

Initially, the BCA had considered using the National Data Exchange (N-DEx) model for developing its NIBRS compliancy program. The N-DEx system complements other law enforcement data-sharing systems such as the National Crime Information Center and the Interstate Identification Index, but it is primarily engineered as an investigative tool while the NIBRS is mainly intended to serve researchers and makers of public policy. Because the N-DEx was not fully compatible with the NIBRS, the BCA decided against using it as a model. Rather, the BCA judged that the National Information Exchange Model (NIEM) would be a better model for its NIBRS-compliant system. The NIEM, which is a system of partnership between the Department of Justice, the Department of Homeland Security, and the Department of Health and Human Services, facilitates information-sharing between agencies by standardizing methodology and semantics, resulting in greater informational compatibility. The BCA concluded that the NIEM would be a good example of how to facilitate interagency information sharing in Minnesota, because Minnesota's law enforcement community desired the ability to share uniform, accurate, detailed crime data.

To implement its NIBRS transition plan, the BCA conducted initial analyses on current systems and future needs. Next, the BCA engaged with an interagency focus group to understand user needs and increase user support. The BCA then selected a set of pilot agencies and their vendors to test and refine the XML submission format, both from the agencies to the state and from the state to the FBI. During this process, the BCA worked closely with the FBI to understand NIBRS requirements, run submission tests, and become NIBRS certified. NIBRS certification is the FBI's approval for an agency to submit NIBRS data, based on the FBI's assessment of whether an agency's submissions meet the FBI's NIBRS submission criteria. The BCA achieved NIBRS certification in August 2016 and expects to complete its testing and compliance phase to conduct a statewide rollout of NIBRS submission in 2017.

Results of Minnesota's NIBRS transition

By developing its own NIBRS participation system, Minnesota has been able to exercise a great amount of flexibility in system development, and the result is that Minnesota can include much more investigative data than a basic NIBRS development plan would. The BCA expects that full NIBRS compliance will result in more accurate and timely capture of crime data. Also, Minnesota's participation in the NIBRS will enable it to favorably exchange crime data with neighboring states, because other states near Minnesota have either completed NIBRS transition or are in the process of making the transition. These enhancements of Minnesota's availability of crime data will enable law enforcement partners to better serve communities. The transition to the NIBRS will benefit the BCA, law enforcement, the public, government entities, surrounding states, and the FBI.

The NIBRS transition process has been a learning experience for Minnesota law enforcement and the BCA. Minnesota developed a detailed set of specifications and business rules for vendors of records management systems. The BCA mapped its statute tables to UCR codes to ensure correct classification of offenses and provided a Web service for records management vendors to ingest data which includes statutes, UCR codes, and descriptions for when a statute corresponds to multiple UCR codes. The BCA also assists local agencies in mapping their ordinances to UCR codes.

Stressing the importance of communication, Minnesota developed a statewide communication strategy that included points of contact, communication schedules, methods, and key messages. The BCA communicates about the NIBRS transition in conferences and onsite visits with pilot agencies, and it produces written communication about the NIBRS transition in quarterly newsletters, fact sheets, magazine articles, and a project webpage.

The BCA maintains active partnership with pilot agencies to facilitate project effectiveness, funding the development of their records management system adapters and providing updates for their vendors and them. Also, the BCA hosts teleconferences with pilot agencies and vendors and participates with them in required training.

Based upon its progress and successes, the BCA has learned a number of valuable lessons that can benefit other agencies in their own NIBRS transition planning. It is important for an agency to involve NIBRS stakeholders in the process and to ensure that it has sufficient resources to complete the project. Also, a state should develop a system for state statutes and local ordinances to map to UCR offense codes so that different agencies or vendors will be consistent in how they report crime data. An agency should create a NIBRS transition training program and tie training requirements and project milestones to any funding payments for vendors. Because vendors do not receive formal FBI training on NIBRS, agencies should allow vendors to attend their state NIBRS training. NIBRS transition is a major change that poses challenges to law enforcement agency staff, so agencies should be supportive of the staff who are implementing the changes. Finally, the BCA's experiences with its NIBRS transition reaffirmed what it knew all along: communication is the key to success.

Georgia's movement toward the NIBRS

In Georgia, law enforcement executives have proactively paid close attention to the issue of NIBRS transition with GBI representation in the APB. The GBI's Director, Vernon M. Keenan, decided in August 2015 that the GBI would achieve Georgia's transition to the NIBRS within the five-year timetable. Director Keenan based the decision on the goal for the GBI to be able to gather more robust statistical data and better utilize law enforcement data-sharing systems. As Director Keenan states, "The collection of crime data statistics is vitally important in modern day policing and shaping public policy. As technology advances, it is crucial that the methods used to track crime advance as well. The Georgia Bureau of Investigation is fully committed to working with the FBI and our local partners to implement NIBRS by the end of 2018."

Georgia has historically embraced a creative, innovative approach to law enforcement. As part of this forward-thinking law enforcement philosophy, Georgia began to participate in the UCR Program's SRS in 1975. Each month, the GBI collects crime and arrest reports from 600 local and state law enforcement agencies, compiling the data in a form that mirrors the federal SRS program. The GBI maintains representation in the Southern Working Group of the FBI's CJIS Advisory Process along with representatives from 12 other southern states, the U.S. Virgin Islands, and Puerto Rico. In addition to its membership in the APB, the GBI actively participates in other nationwide criminal justice-related programs such as the National Crime Prevention and Privacy Compact Council. Director Keenan's decision for the GBI to make the transition to the NIBRS ahead of many other law enforcement agencies continued Georgia's forward-thinking tradition of law enforcement.

The GBI's NIBRS transition plan

In January 2016, the GBI formulated a high-level schedule for the NIBRS transition, identifying key milestones of progress. Director Comey's announcement on February 9, 2016 reinforced the importance of Georgia's timetable. With Georgia Crime Information Center personnel in charge of the NIBRS transition initiative, the GBI spent February and March of 2016 meeting with service providers, operational staff, and representatives of other states to determine what products were available, what the system requirements would be, and what actions other states had taken toward their own NIBRS transitions. Initially, the GBI tentatively planned to develop its NIBRS system with its own personnel and resources, as it had successfully done with its earlier implementation of an SRS-compatible system.

However, after research and deliberation, the GBI decided to recommend the procurement of services from a service provider that had already successfully developed NIBRS-compatible systems for other agencies. Such an experienced service provider would reduce the risks associated with the new system's design and implementation. Also, the service provider would be able to provide a user interface for direct entry while offering an interface document that local law enforcement agencies could use. These local law enforcement agencies would use the interface document as reference while integrating their own records management systems with the GBI's NIBRS application.

To meet its aggressive timetable, the GBI structured its system requirements in such a manner that the service provider would first focus on compatibility with the FBI's NIBRS fields and requirements. If ideally possible, the service provider would include any additional data elements to satisfy Georgia's requirements. However, as a matter of priority, if inclusion of any data elements would delay the transition to the FBI NIBRS, then the service provider would not include those elements until a later phase of development. This decision to prioritize compatibility with the NIBRS would likely prevent the initiative from being delayed by deliberations over extraneous requirements, a problem that commonly plagues organizational projects that do not establish priorities from the outset.

The plan for the GBI to make the transition to the NIBRS faces financial challenges, as the FBI acknowledges that other agencies will face in their own efforts at NIBRS transition. The GBI expects education to be another challenge. Because local law enforcement agencies are the contributors of UCR data to the FBI, the GBI considers education of local law enforcement agencies to be a key factor in the GBI's success in achieving the transition. In June 2016, the GBI issued an Operations Bulletin regarding the state's efforts to move toward NIBRS compliance, stressing the need for local law enforcement agencies to prepare for the state's transition to the NIBRS. Once the GBI has deployed its NIBRS application, it plans to give local law enforcement agencies that use a records management system for UCR data submission one year to develop and test an interface between their systems and the state system.

The June 2016 Operations Bulletin addressed the fact that local law enforcement agencies could incur costs associated with interfacing their record management systems with the state's system and that cost could be a significant risk factor for the initiative. While the GBI will assume the costs associated with the implementation of the state data system, local law enforcement agencies could incur costs if they wish to integrate their local records management systems with the GBI's NIBRS-compliant system. In August 2016, the GBI issued a Request for Proposal to procure a service provider to implement a state NIBRS system.

Representatives of the GBI actively promote the state's NIBRS transition plan at conferences, on its website at <https://gbi.georgia.gov>, in regular training activities, and in meetings and site visits with local agencies. Since the June 2016 Operations Bulletin, the GBI has advised local agencies that Georgia intends to implement the transition to the NIBRS by the end of 2018. The GBI intends to address the topic of NIBRS transition at meetings with the Georgia Association of Chiefs of Police and the Georgia Sheriffs' Association.

The GBI's goal for its NIBRS transition

Once Georgia is fully NIBRS-compliant, the state and its agencies hope to gain several advantages over the current system. By gathering more robust statistical data that includes incident-based information and many more categories of criminal offenses, agencies in Georgia can formulate well-informed public policies and policing strategies to more effectively combat crime and protect communities. The incident-based reporting of the NIBRS can provide information that is useful for tactical decision-making, strategic planning, crime mapping, and research. By participating with the NIBRS, the GBI can both benefit from other states' crime

data and provide data that will benefit other states. Also, by developing the system for incident-based reporting to the FBI's NIBRS, Georgia agencies can more readily participate in other incident-based law enforcement data systems such as the National Data Exchange.

The GBI has set itself an ambitious plan to achieve full participation in the NIBRS well ahead of the FBI's January 1, 2021, deadline. Having embarked upon the process of transition to the NIBRS, the GBI has this advice to offer other agencies that are planning their own NIBRS transitions: they should get started now.

January 2017